



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Application of

Bruno Cattaruzzi

Application No. 09/740,966

Examiner: Son T. Nguyen
Group Art Unit 3643

Filed December 21, 2000

For APPARATUS FOR LOADING FOWL

26 North Second Street

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November 16, 2004

Hon. Commissioner for Patents

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In response to the Office Action dated August 19, 2004, please amend the above-mentioned application as follows:

CLAIMS

Claim 1. (Previously Amended) An apparatus for capturing, conveying and loading fowl into selected compartments of a plurality of storage cages, comprising:

- a) frame;
- b) forward conveying means pivotally mounted to said frame for sweeping rotation about a vertical axis to capture said

fowl from points forward and laterally of said frame and convey
conveying said fowl to said vertical axis proximate said frame;
c) rearward conveying means pivotally mounted to said frame,
independent of an subjacent said forward conveying means, for
rotation about said vertical axis to receive receiving said fowl from
said forward conveying means, conveying and convey said fowl
from said frame and discharging to discharge said fowl into
selected ones of said compartments forming said storage cages,
wherein said rearward conveying means is also pivotally mounted
to said frame for movement about ~~both~~ a horizontal axis ~~and a~~
~~vertical axis~~ to accommodate the discharge of said fowl into said
compartments which may be disposed in numerous and varied
positions both vertically and laterally in relation to said frame.

Claim 2. (Amended) An apparatus is as described in Claim 1 further comprising
pivot means rotably rotatably mounted to said frame and to which said forward and
rearward conveying means are mounted to accommodate independent pivotal
movement of said forward and rearward conveying means about ~~a singular~~ said vertical
axis and wherein said vertical axis extends through a rearward end of said forward
conveying means from which said fowl are discharged ~~is always maintained about and~~
~~a receiving end of said rearward conveying means regardless of the angular~~
~~relationship, both vertically and horizontally of said forward and rearward conveying~~
means.

Claim 3. (Original) Claim 3 depends from Claim 1 and incorporates its limitations therein and, accordingly, would be allowable based on the arguments set forth above.

Claim 4. (Previously Amended) An apparatus as described in claim 3 wherein said pivot means comprises:

- a) a primary slewing ring mounted to said frame for rotation about a vertical axis,
- b) a primary slewing frame connected to said primary slewing ring and pivotally connected to said forward conveying means,
- c) a secondary slewing ring rotatably mounted to said frame in coaxial relation to said primary slewing ring, and
- d) a secondary slewing frame connected to said secondary slewing ring and pivotally connected to said rearward conveyor means.

Claim 5. (Previously Amended) Apparatus as described in claim 4 wherein said primary slewing frame comprises:

- a) a support member connected to said primary slewing ring and extending horizontally therefrom, and
- b) one or more fulcrum members connected to said support member opposite said primary slewing ring and in vertically angular relation to said support member, wherein said forward conveying means is pivotally connected to an upper end of said one or more fulcrum members for rotational movement about a horizontal axis.

Claim 6. (Previously Amended) Apparatus as described in claim 5 further comprising first means connected to said primary slewing frame and to said forward conveying means for urging said forward conveying means about said horizontal axis.

Claim 7. (Previously Amended) An apparatus as described in claim 6 wherein said first urging means comprises:

- a) one or more lift arms pivotally connected to a lower end of said fulcrum members and slidably connected to said forward conveying means; and
- b) a plurality piston and shaft assemblies pivotally connected to said fulcrum members and to said lift arms for selectively urging said lift arms about a horizontal axis and, correspondingly, rotating said forward conveyor vertically about another horizontal axis located proximate said upper ends of said fulcrum members.

Claim 8. (Original) An apparatus as described in claim 4 wherein said secondary slewing frame comprises one or more plates pivotally connected to said rearward conveying means.

Claim 9. (Original) An apparatus as described in claim 8 further comprising second means pivotally connected to said secondary slewing frame and to said rearward conveying means for urging said rearward conveying means about a horizontal axis.

Claim 10. (Original) An apparatus as described in claim 9 wherein said second urging means comprises one or more second piston and shaft assemblies pivotally connected to said secondary slewing frame and to said rearward conveying means.

Claim 11. (Previously Amended) An apparatus as described in claim 1 wherein said forward conveying means comprises:

- a) forward conveyor frame pivotally mounted to said frame;
- b) a plurality of rollers mounted within said forward conveyor frame for rotational movement;
- c) a forward conveyor belt supported by said forward rollers in pressed contact therewith such that rotation of one or more of said forward rollers will urge said belt in continuous motion about said forward rollers and along said forward frame; and
- d) forward gathering means connected to said forward conveyor frame for engaging one or more of said fowl and thrusting said fowl onto said forward conveyor belt so that said fowl are transported on said forward conveyor belt from said gathering means to a rearward end of said forward conveying means which is disposed above a receiving end of said rearward conveying means and wherein said fowl are discharged from said rearward end of said forward conveying means and fall vertically to said receiving end of said rearward conveying means.

Claim 12. (Original) An apparatus as described in claim 11 wherein said forward gathering means comprises a plurality of forward fingered drums rotatably mounted to said forward conveyor frame for rotary movement about substantially parallel axis wherein each of said drums are driven in opposite rotary directions relative to adjacent others of said drums.

Claim 13. (Previously Amended) An apparatus as described in claim 12 further comprising a pair of flexible combs each connected to opposite sides of said forward conveyor frame and proximate said plurality of forward fingered drums for containing said fowl on said forward conveyor belt, wherein each comb includes flexible teeth which will bend to allow the discharge of fowl from said forward conveyor when said fowl exceed a predetermined density thereon.

Claim 14. (Previously Amended) An apparatus as described in claim 11 further comprising a discharge hood connected to said rearward end of said forward conveyor frame and defining a top panel connected to and supported by two side panels which are connected to said forward conveyor frame and positioned laterally of said forward conveyor belt, and a rear panel connected to said side panels and said top panel opposite said forward conveyor belt wherein said top, rear and side panels limit horizontal movement of fowl discharged from said forward conveyor belt but allow said fowl to drop downward from said forward conveyor belt and onto said receiving end of said rearward conveying means.

Claim 15. (Original) An apparatus as described in claim 4 wherein said secondary slewing frame comprises one or more vertically disposed plates pivotally connected to said rearward conveying means.

Claim 16. (Previously Amended) An apparatus as described in claim 1 wherein said rearward conveying means comprises:

- a) a first rearward conveyor pivotally mounted to said frame for pivotal movement about a horizontal axis and a vertical axis; and
- b) a second rearward conveyor slidably connected to said first rearward conveyor for sliding telescopic extension and retraction relative thereto; and
- c) automatic urging means connected to said first and second rearward conveyors for automatically urging said second rearward conveyor and sliding motion relative to said first rearward conveyor concurrently with and proportionately responsive to the pivotal movement of said rearward conveying means about said horizontal axis.

Claim 17. (Cancelled)

Claim 18. (Amended) An apparatus as described in claim 17 16 wherein said automatic urging means comprises a plurality of linkage members, each pivotally connected to one of the others of said plurality of linkage members and wherein one of said linkage members is pivotally connected to said second rearward conveyor and another of said linkage members is connected to said first rearward conveyor.

- Claim 19.** (Amended) An apparatus as described in claim 16 wherein said automatic urging means comprises;
- a) a first linkage member pivotally secured to ~~said frame a secondary slewing ring, wherein said secondary slewing ring is rotatably mounted to said frame for rotation about a vertical axis and is pivotally connected to and supports said first rearward conveyor;~~
 - b) a second linkage member pivotally connected to said first linkage member and pivotally connected to said first rearward conveyor;
and
 - c) a third linkage member pivotally connected to said second linkage member and pivotally connected to said second rearward conveyor, wherein upward pivotal movement of said first rearward conveyor will, via said first, second and third linkage members, urge said second rearward conveyor in sliding ~~rotation motion~~ along said first rearward conveyor and away from said frame and wherein downward pivotal movement of said first rearward conveyor will urge said second rearward conveyor in sliding motion along said first rearward conveyor and toward said frame.

Claim 20. (Original) An apparatus as described in claim 18 wherein said second linkage member comprises a first linkage arm pivotally connected to said first linkage member and a second linkage arm pivotally connected to said third linkage member,

wherein said first linkage arm is joined to said second linkage arm in fixed angular relation thereto.

Claim 21. (Original) An apparatus as described in claim 16 comprising means for selectively urging said second rearward conveyor in sliding motion relative to said first rearward conveyor.

Claim 22. (Amended) An apparatus as described in claim 17 16 wherein said automatic urging means comprises means for selectively urging said second rearward conveyor in sliding motion relative to said first rearward conveyor.

Claim 23. (Original) An apparatus as described in claim 21 or claim 22 wherein said selective urging means comprises a piston and shaft assembly pivotally connected to said second rearward conveyor.

Claim 24. (Original) An apparatus as described in claim 19 wherein said third linkage member comprises a piston and shaft assembly pivotally connected to said second linkage member and pivotally connected to said second rearward conveyor.

Claim 25. (Amended) An apparatus as described in claim 15 wherein said rearward conveying means comprises;

- a) a first rearward conveyor pivotally connected to said one or more vertical plates for pivotal motion about a horizontal axis, ~~and; and~~
- b) a second rearward conveyor slidably connected to said first rearward conveyor for sliding movement relative thereto.

Claim 26. (Original) An apparatus as described in claim 25 comprising means for automatically urging said second rearward conveyor in sliding movement relative to said

first rearward conveyor concurrently with and proportionately responsive to the pivotal movement of said first rearward conveyor about a horizontal axis.

Claim 27. (Amended) An apparatus as described in claim 26 wherein said automatic urging means comprises;

- a) a first linkage member pivotally connected to said secondary slewing frame;
- b) a second linkage member pivotally connected to said first linkage member and pivotally connected to said first rearward conveyor; and ;
- c) a third linkage member pivotally connected to said linkage member and connected to said second rearward conveyor.

Claim 28. (Original) An apparatus as described in claim 27 wherein said second linkage member comprises:

- a) a first linkage arm pivotally connected to said first rearward conveyor and pivotally connected to said first linkage member; and
- b) a second linkage arm pivotally connected to said first rearward conveyor and pivotally connected to said third linkage member, wherein said first linkage arm is connected to said second linkage arm and extends therefrom in fixed angular relation thereto.

Claim 29. (Original) An apparatus as described in claim 27 wherein said third linkage member comprises means for selectively urging said second rearward conveyor in sliding motion relative to said first rearward conveyor.

Claim 30. (Original) An apparatus as described in claim 27 wherein said third linkage member comprises a piston and shaft assembly for selectively urging said second rearward conveyor in sliding motion relative to said first rearward conveyor.

Claim 31. (Original) An apparatus as described in claim 4 further comprising means connected to said secondary slewing frame for urging said rearward conveying means about said horizontal axis.

Claim 32. (Original) An apparatus for as described in claim 16 further comprising means connected to said second rearward conveyor for discharging said fowl from said second rearward conveyor.

Claim 33. (Previously Amended) An apparatus for the capturing and loading of fowl comprising:

- a) a frame;
- b) a first rearward conveyor pivotally mounted to said frame for pivotal movement about a horizontal axis;
- c) a second rearward conveyor slidably connected to said first rearward conveyor for sliding telescopic movement relative thereto; and
- d) means mounted to said first and second rearward conveyors for automatically urging said second rearward conveyor in sliding telescopic movement relative to said first rearward conveyor concurrently with and proportionately responsive to the pivotal movement of said first rearward conveyor.

Claim 34. (Previously Amended) An apparatus as described in claim 33 wherein said automatic urging means comprises a plurality of linkage member, each pivotally connected to one of the others of said plurality of linkage members and wherein one of said plurality of linkage members is pivotally connected to said second rearward conveyor and another of said linkage members is connected to said first rearward conveyor.

Claim 35. (Original) An apparatus as described in claim 33 wherein said automatic urging means comprises;

- a) a first linkage member pivotally secured to said frame,
- b) a second linkage member pivotally connected to said first linkage member and pivotally connected to said first rearward conveyor;
and
- c) a third linkage member pivotally connected to said second linkage member and pivotally connected to said second rearward conveyor, wherein upward pivotal movement of said first rearward conveyor will, via said first, second and third linkage members, urge said second rearward conveyor in sliding rotation along said first rearward conveyor and away from said frame and wherein downward pivotal movement of said first rearward conveyor will urge said second rearward conveyor in sliding motion along said first rearward conveyor and toward said frame.

Claim 36. (Original) An apparatus as described in claim 35 wherein said second linkage member comprises a first linkage arm pivotally connected to said first linkage

member and a second linkage arm pivotally connected to said third linkage member, wherein said first linkage arm is joined to said second linkage arm in fixed angular relation thereto.

Claim 37. (Previously Amended) An apparatus as described in claim 32 wherein said discharging means includes a discharge carriage pivotally connected to said second rearward conveyor for movement about a substantially vertical axis and laterally of the second rearward conveyor; and a rearward fingered drum ~~rotably~~ rotatably connected to said discharge carriage for engaging said fowl and discharging said fowl from said second rearward conveyor.